

AMENDMENTS TO THE CLAIMS

1-8. (canceled)

9. (currently amended) A mask for ~~vapor hydrogen fluoride~~ selective etching of an underlying layer using vapor hydrogen fluoride etchant,

said mask comprising a layer of patterned polyimide,

said layer of patterned polyimide being removable after said etching.

10. (original) The mask of claim 9 wherein said polyimide is non-photosensitive.

11. (original) The mask of claim 9 wherein said polyimide is photosensitive.

12. (original) The mask of claim 10 wherein said polyimide comprises DUPONT PI-1111.

13-26. (canceled)

27. (currently amended) A mask for etching, comprising

a layer of material resistant to vapor hydrogen fluoride etchant patterned to expose a portion of material under said layer such that said portion can be etched by vapor hydrogen fluoride etchant,

wherein said layer of material resistant to vapor hydrogen fluoride etchant comprises polyimide, and

wherein said layer of material resistant to vapor hydrogen fluoride is removable after etching.

28. (canceled)
29. (previously presented) The mask of Claim 27 wherein said polyimide is photosensitive.
30. (previously presented) The mask of Claim 27 wherein said polyimide is non-photosensitive.
31. (previously presented) The mask of Claim 27 wherein said material resistant to vapor hydrogen fluoride etchant is patterned by planerization.
32. (currently amended) The mask of Claim 27 wherein the layer of material resistant to vapor hydrogen fluoride etchant has a small opening ~~therethrough~~ within said layer and extending through said layer to expose the portion of material under said layer.
33. (previously presented) The mask of Claim 32 wherein said small opening has dimensions of less than one micrometer.
34. (currently amended) An etch resistant masking layer, comprising
- a layer of material resistant to vapor hydrogen fluoride etchant having an opening ~~therethrough~~ within said layer and extending through said layer to expose a portion of an underlying layer such that said portion can be etched by vapor hydrogen fluoride etchant,
- said layer of material resistant to vapor hydrogen fluoride etchant being removable after etching.

35. (previously presented) The masking layer of Claim 34 wherein said layer of material resistant to vapor hydrogen fluoride etchant comprises polyimide.

36. (previously presented) The masking layer of Claim 35 wherein said polyimide is photosensitive.

37. (previously presented) The masking layer of Claim 35 wherein said polyimide is non-photosensitive.

38. (previously presented) The masking layer of Claim 34 wherein said opening in said material resistant to vapor hydrogen fluoride etchant is formed by planerization.

39. (previously presented) The masking layer of Claim 34 wherein said opening is less than one micrometer in width.

40. (currently amended) A mask for etching, comprising

a layer of material resistant to vapor hydrogen fluoride etchant having an opening within said layer and extending through said layer for exposing a portion of material under said layer,

said opening adapted to permit flow therethrough of vapor hydrogen fluoride etchant for etching said exposed portion,

wherein said layer of material resistant to vapor hydrogen fluoride etchant comprises polyimide, and

wherein said layer of material resistant to vapor hydrogen fluoride is removable after said etching.

41. (canceled)
42. (previously presented) The mask of Claim 40 wherein said polyimide is photosensitive.
43. (previously presented) The mask of Claim 40 wherein said polyimide is non-photosensitive.
44. (previously presented) The mask of Claim 40 wherein said material resistant to vapor hydrogen fluoride etchant is patterned by planerization.
45. (previously presented) The mask of Claim 40 wherein said opening has dimensions of less than one micrometer.
46. (currently amended) An intermediate structure, comprising:
- a masking layer resistant to vapor hydrogen fluoride etchant having an opening ~~therethrough~~ within said masking layer and extending through said masking layer, said masking layer being removable after etching;
- a layer of material underlying said masking layer having a cavity formed therein by having a portion of material exposed by said opening etched by vapor hydrogen fluoride etchant;
and
- vapor hydrogen fluoride etchant in said opening and said cavity.
47. (previously presented) The intermediate structure of Claim 46 wherein said masking layer comprises polyimide.

48. (previously presented) The intermediate structure of Claim 47 wherein said polyimide is photosensitive.

49. (previously presented) The intermediate structure of Claim 47 wherein said polyimide is non-photosensitive.

50. (previously presented) The intermediate structure of Claim 46 wherein said opening has dimensions of less than one micrometer.